## CLAIMS

What is claimed is:

1. A biological chamber system comprising a biochamber and center lumen, said biochamber being defined by outer walls of an engineered Sertoli tissue construct.

2. The system according to claim 1, wherein said engineered Sertoli tissue construct form said center lumen surrounding a population of cells which are different than said engineered Sertoli tissue construct .

3 The system according to claim 2, wherein said center lumen contains pancreatic islet cells.

4. The system according to claim 2, wherein said center lumen contains neuronal cells.

5. The system according to claim 4, wherein said neuronal cells are NT2 neurons.

6. The system according to claim 1, wherein said outer walls are formed from a plurality of engineered Sertoli cells to form the tissue construct.

7. The system according to claim 6, wherein said outer walls comprise a immunoprotective system.

8 The system according to claim 1, wherein said biological chamber system is used for transplantation.

9. A transplantation facilitator comprising a biochamber.

10. The transplantation facilitator according to claim 9, wherein said biochamber is defined as having outer walls formed of engineered Sertoli tissue construct.

11. The transplantation facilitator according to claim 10, wherein said biochamber is further defined as having a center lumen surrounding therapeutic cells.

12. The transplantation facilitator according to claim 11, wherein said therapeutic cells are neuronal cells.

13. A method of making biochambers comprising the steps of:

co-culturing facilitator cells and therapeutic cells about the therapeutic cells to form a chamber thereabout; and

re-engineering the facilitator cells to form a tissue construct.

14 The method according to claim 13, further including the step of segregating the facilitator cells away from the therapeutic cells.

15. The method according to claim 14, wherein said segregating step further includes the step of inducing the epithelization and polarization of the facilitator cells.

16. The method according to claim 17, wherein said inducing step further includes adding a compound for inducing epithelization and polarization.

17. A method of transplanting cells comprising the steps of:
forming a biochamber,
incorporating therapeutic cells into said biochamber; and
transplanting the biochamber containing the transplant cells into a host.

18. The method according to claim 17, wherein said incorporating step further includes co-culturing the therapeutic cells with cells which form the biochamber simultaneously.

19. A biochamber comprising an outer wall of facilitator cells and an inner lumen of therapeutic cells.

20. A biochamber comprising an outer wall of protective cells and an inner wall of secreting cells, said outer wall allowing for release from said biochamber of the secretions from said secreting cells.

21. A transplantation vessel comprising a housing made of one type of cell including an inner cavity and a center lumen surrounding a population of cells different from said housing.

22. The transplantation vessel according to claim 21, wherein said housing consists of engineered Sertoli tissue construct.

23. The transplantation vessel according to claim 21, wherein said cell population consists of at least one therapeutic cell.

24. The transplantation vessel according to claim 23, wherein said therapeutic cells are selected from the group consisting essentially or neuronal cells, NT2 cells, pancreatic islet cells, dopaminergic cells, and bovine chromaffin cells.